

Technical leaflet**Screen printing ink****SERIES 275****Universal screen printing ink for paper and cardboard for decorative applications**

A silk finish ink, through mixing with binding component series 275-07 gives good coverage and mileage, suitable for interior use for many graphic applications on various paper and board substrates.

Substrates

Suitable for a wide range of wood based substrates such as box board, pulp board and papers.

Because of the diverse range of material compositions it is imperative that the printer carries out trials to establish ink suitability.

Uses

Suitable for most point-of-sale uses on paper and box-board, poster printing, and packaging. The quality raw materials used ensure that series 275 gives good adhesion with a high scuff-resistant finish, they are also well suited for most finishing processes (cutting/creasing/embossing) Series 275 is designed for good ink removal and is problem free for re-cycling

Properties

This series contains a mixture of 20% by weight of binder series 275-07, which makes it for hand, flat bed as well as cylinder printing and ensuring good self-solvency of inks and open mesh characteristics with fast on-substrate drying.

Additives

For optimum printing 10-20% (by weight) of universal thinners series 200-17 should give consistency of print and good working viscosity under normal circumstances. For more extreme conditions please refer to the technical leaflet 200-“screenprinting additives” Care should be taken when using additives to ensure that stability is not compromised.

Colour shades

The 275 ink series is heavy metal free, monopigmented and suitable for matching to MS-colour mixing system.

Colours available:

275 – 1000	Lemon yellow
275 – 1100	Yellow (light)
275 – 1200	Yellow (reddish)
275 – 2000	Orange
275 – 3000	Carnation red
275 – 3100	Transparent red
275 – 3200	Transparent dark red

275 – 3300	Transparent magenta
275 – 4000	Transparent violet

275 – 5000	Transparent blue
275 – 6000	Transparent green
275 – 7000	Red / brown
275 – 8000	Mixing black
275 – 9000	Mixing white
275 – 0900	Ultramarine (non-fade properties)

The transparent inks are suitable for colour adjustment whilst keeping their brilliance of colour matches and are also suitable for tinting with metallic pigments.

According to the MS Mixingsystem, in use the inks are made up of 80% by weight of base colour and at least 20% of binding series 275-07

Standard inks according to colour range ST
31 brightshades (shade 08-38)
fluorescent colours are obtainable according to the colour chart ST

Metallics:	
275 – 100	Silver (rub proof)
275 – 101	Britannia silver
275 – 102	Light gold
275 – 103	Middle gold
275 – 105	Rich gold
275 – 106	Copper

Various inks can be made to customer specification, these include metal-free bronze as well as the ST recipes.

275 – 200	Pearl gloss silver
275 – 02299	Course silver

The following matt inks are standard to the range and the other basic colours can be made in matt on request

275 – 8000/MT	matt black
275 – 9000/MT	matt white

Trichromatic colours:

230 – 0950	Cyan
230 – 0960	Yellow
230 – 0970	Magenta
230 – 0980	Deep black

And blending pastes:

230 – 04	Extender base
275 – 06	Retarder paste
275 – 07	Binder paste

To expand the special uses there are also different standard lacquers to choose from

275 – 05	Silk lacquer
275 – 05/MT	Matt lacquer

If the inks in series 275 are for exterior use we recommend overprinting with a special lacquer from the series 85 – 5700 for best non-fade properties.

All the above colours conform to EN 71, Part 3 (safety of toys, migrations of various elements) and are heavy metal free. The inks all have a blue wool rating of 6-8 (DIN 16525) with the exception of fluorescent and ultramarine in the MC-Colour-system 0900 and care should be taken with white or clear lacquer discolouration under strong lighting conditions.

Drying

The solvent composition of universal thinner series 200-017 is specially formulated to stay open in the screen so retarders are not usually necessary, but the ink still has quick drying properties.

Meshes

The 275 series is suitable for use with all usual meshes and capillary films. But nitro-cellulose stencil materials should be avoided .

Cleaning

The 275 series can be cleaned down with most usual solvent-based cleaners but Printcolor AG recommend universal cleaner series 200-BRS & 200-URS

Storage

Under normal storage conditions (low temperature changes 20-35C, humidity 20-70%) the ink can be stored for up to 2 years (6 months for metallic inks) without deterioration of ink properties.

Packaging

Available in standard 1kg and 5kg polyethylene tubs that are suitable for re-cycling after removal of ink remnants. The unhardened ink requires special waste disposal (wastekey 55509 in Germany, special waste X (1640) Switzerland)

MS – BASIC COLOURMATCH SYSTEM

Based on the MS basecolours you can compile the following ink order

Series 275 (previously series 175!)

MS – series 275 +20% weight series 275-07

Series 242 (previously series 742!)

MS-series 277+ 20% weight series 272-07

The above information has been gathered through stringent laboratory tests and trials. Our technical advice is given to the best of our knowledge but we would recommend that customers always do their own trials for ink suitability due to the variable nature of production conditions and therefore lie outside our guarantee liabilities. Any use of non-recommended products or alien products are used at the customers own risk and releases Printcolor Screen AG from any further consequences.

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